

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/663,650A  
Source: 1Fwo  
Date Processed by STIC: 10/29/04

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 10/29/2004

PATENT APPLICATION: US/10/663,650A

TIME: 17:14:05

Input Set : A:\Updated Sequence Listing.ST25.txt

Output Set: N:\CRF4\10292004\J663650A.raw

3 <110> APPLICANT: Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo  
 4 ARIYASU, Toshio  
 5 MATSUMOTO, Shuji  
 6 KYONO, Fumiyo  
 7 HANAYA, Toshiharu  
 8 ARAI, Shigeyuki  
 9 IKEDA, Masao  
 10 KURIMOTO, Masashi  
 12 <120> TITLE OF INVENTION: TREHALOSE RECEPTOR AND METHOD FOR DETECTING TREHALOSE WITH  
 THE  
 13 SAME  
 15 <130> FILE REFERENCE: ARIYASU2  
 17 <140> CURRENT APPLICATION NUMBER: 10/663,650A  
 18 <141> CURRENT FILING DATE: 2003-09-17  
 20 <160> NUMBER OF SEQ ID NOS: 24  
 22 <170> SOFTWARE: PatentIn version 3.3  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 374  
 26 <212> TYPE: PRT  
 27 <213> ORGANISM: Homo sapiens  
 30 <220> FEATURE:  
 31 <221> NAME/KEY: misc feature  
 32 <223> OTHER INFORMATION: GENBANK Accession no. M80632  
 34 <400> SEQUENCE: 1  
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 37 1 5 10 15  
 40 Glu Glu Lys Thr Ala Ala Arg Ile Asp Gln Glu Ile Asn Arg Ile Leu  
 41 20 25 30  
 44 Leu Glu Gln Lys Lys Gln Glu Arg Glu Glu Leu Lys Leu Leu Leu Leu  
 45 35 40 45  
 48 Gly Pro Gly Glu Ser Gly Lys Ser Thr Phe Ile Lys Gln Met Arg Ile  
 49 50 55 60  
 52 Ile His Gly Val Gly Tyr Ser Glu Glu Asp Arg Arg Ala Phe Arg Leu  
 53 65 70 75 80  
 56 Leu Ile Tyr Gln Asn Ile Phe Val Ser Met Gln Ala Met Ile Asp Ala  
 57 85 90 95  
 60 Met Asp Arg Leu Gln Ile Pro Phe Ser Arg Pro Asp Ser Lys Gln His  
 61 100 105 110  
 64 Ala Ser Leu Val Met Thr Gln Asp Pro Tyr Lys Val Ser Thr Phe Glu  
 65 115 120 125  
 68 Lys Pro Tyr Ala Val Ala Met Gln Tyr Leu Trp Arg Asp Ala Gly Ile  
 69 130 135 140  
 72 Arg Ala Cys Tyr Glu Arg Arg Arg Glu Phe His Leu Leu Asp Ser Ala  
 73 145 150 155 160

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76 Val Tyr Tyr Leu Ser His Leu Glu Arg Ile Ser Glu Asp Ser Tyr Ile
77                               165                               170                               175
80 Pro Thr Ala Gln Asp Val Leu Arg Ser Arg Met Pro Thr Thr Gly Ile
81                               180                               185                               190
84 Asn Glu Tyr Cys Phe Ser Val Lys Lys Thr Lys Leu Arg Ile Val Asp
85                               195                               200                               205
88 Val Gly Gly Gln Arg Ser Glu Arg Arg Lys Trp Ile His Cys Phe Glu
89                               210                               215                               220
92 Asn Val Ile Ala Leu Ile Tyr Leu Ala Ser Leu Ser Glu Tyr Asp Gln
93 225                               230                               235                               240
96 Cys Leu Glu Glu Asn Asp Gln Glu Asn Arg Met Glu Glu Ser Leu Ala
97                               245                               250                               255
100 Leu Phe Ser Thr Ile Leu Glu Leu Pro Trp Phe Lys Ser Thr Ser Val
101                               260                               265                               270
104 Ile Leu Phe Leu Asn Lys Thr Asp Ile Leu Glu Asp Lys Ile His Thr
105                               275                               280                               285
108 Ser His Leu Ala Thr Tyr Phe Pro Ser Phe Gln Gly Pro Arg Arg Asp
109                               290                               295                               300
112 Ala Glu Ala Ala Lys Ser Phe Ile Leu Asp Met Tyr Ala Arg Val Tyr
113 305                               310                               315                               320
116 Ala Ser Cys Ala Glu Pro Gln Asp Gly Gly Arg Lys Gly Ser Arg Ala
117                               325                               330                               335
120 Arg Arg Phe Phe Ala His Phe Thr Cys Ala Thr Asp Thr Gln Ser Val
121                               340                               345                               350
124 Arg Ser Val Phe Lys Asp Val Arg Asp Ser Val Leu Ala Arg Tyr Leu
125                               355                               360                               365
128 Asp Glu Ile Asn Leu Leu
129                               370
132 <210> SEQ ID NO: 2
133 <211> LENGTH: 374
134 <212> TYPE: PRT
135 <213> ORGANISM: Homo sapiens
138 <220> FEATURE:
139 <221> NAME/KEY: misc_feature
140 <223> OTHER INFORMATION: GENBANK Accession no. M63904
142 <400> SEQUENCE: 2
144 Met Ala Arg Ser Leu Thr Trp Arg Cys Cys Pro Trp Cys Leu Thr Glu
145 1                               5                               10                               15
148 Asp Glu Lys Ala Ala Ala Arg Val Asp Gln Glu Ile Asn Arg Ile Leu
149                               20                               25                               30
152 Leu Glu Gln Lys Lys Gln Asp Arg Gly Glu Leu Lys Leu Leu Leu
153                               35                               40                               45
156 Gly Pro Gly Glu Ser Gly Lys Ser Thr Phe Ile Lys Gln Met Arg Ile
157                               50                               55                               60
160 Ile His Gly Ala Gly Tyr Ser Glu Glu Glu Arg Lys Gly Phe Arg Pro
161 65                               70                               75                               80
164 Leu Val Tyr Gln Asn Ile Phe Val Ser Met Arg Ala Met Ile Glu Ala
165                               85                               90                               95
168 Met Glu Arg Leu Gln Ile Pro Phe Ser Arg Pro Glu Ser Lys His His

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169          100          105          110
172 Ala Ser Leu Val Met Ser Gln Asp Pro Tyr Lys Val Thr Thr Phe Glu
173          115          120          125
176 Lys Arg Tyr Ala Ala Ala Met Gln Trp Leu Trp Arg Asp Ala Gly Ile
177          130          135          140
180 Arg Ala Cys Tyr Glu Arg Arg Arg Glu Phe His Leu Leu Asp Ser Ala
181 145          150          155          160
184 Val Tyr Tyr Leu Ser His Leu Glu Arg Ile Thr Glu Glu Gly Tyr Val
185          165          170          175
188 Pro Thr Ala Gln Asp Val Leu Arg Ser Arg Met Pro Thr Thr Gly Ile
189          180          185          190
192 Asn Glu Tyr Cys Phe Ser Val Gln Lys Thr Asn Leu Arg Ile Val Asp
193          195          200          205
196 Val Gly Gly Gln Lys Ser Glu Arg Lys Lys Trp Ile His Cys Phe Glu
197          210          215          220
200 Asn Val Ile Ala Leu Ile Tyr Leu Ala Ser Leu Ser Glu Tyr Asp Gln
201 225          230          235          240
204 Cys Leu Glu Glu Asn Asn Gln Glu Asn Arg Met Lys Glu Ser Leu Ala
205          245          250          255
208 Leu Phe Gly Thr Ile Leu Glu Leu Pro Trp Phe Lys Ser Thr Ser Val
209          260          265          270
212 Ile Leu Phe Leu Asn Lys Thr Asp Ile Leu Glu Glu Lys Ile Pro Thr
213          275          280          285
216 Ser His Leu Ala Thr Tyr Phe Pro Ser Phe Gln Gly Pro Lys Gln Asp
217          290          295          300
220 Ala Glu Ala Ala Lys Arg Phe Ile Leu Asp Met Tyr Thr Arg Met Tyr
221 305          310          315          320
224 Thr Gly Cys Val Asp Gly Pro Glu Gly Ser Lys Lys Gly Ala Arg Ser
225          325          330          335
228 Arg Arg Leu Phe Ser His Tyr Thr Cys Ala Thr Asp Thr Gln Asn Ile
229          340          345          350
232 Arg Lys Val Phe Lys Asp Val Arg Asp Ser Val Leu Ala Arg Tyr Leu
233          355          360          365
236 Asp Glu Ile Asn Leu Leu
237          370
240 <210> SEQ ID NO: 3
241 <211> LENGTH: 355
242 <212> TYPE: PRT
243 <213> ORGANISM: Homo sapiens
246 <220> FEATURE:
247 <221> NAME/KEY: misc_feature
248 <223> OTHER INFORMATION: GENBANK Accession no. NM_002073
250 <400> SEQUENCE: 3
252 Met Gly Cys Arg Gln Ser Ser Glu Glu Lys Glu Ala Ala Arg Arg Ser
253 1          5          10          15
256 Arg Arg Ile Asp Arg His Leu Arg Ser Glu Ser Gln Arg Gln Arg Arg
257          20          25          30
260 Glu Ile Lys Leu Leu Leu Leu Gly Thr Ser Asn Ser Gly Lys Ser Thr
261          35          40          45

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Input Set : A:\Updated Sequence Listing.ST25.txt

Output Set: N:\CRF4\10292004\J663650A.raw

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264 Ile Val Lys Gln Met Lys Ile Ile His Ser Gly Gly Phe Asn Leu Glu
265      50                      55                      60
268 Ala Cys Lys Glu Tyr Lys Pro Leu Ile Ile Tyr Asn Ala Ile Asp Ser
269 65                      70                      75                      80
272 Leu Thr Arg Ile Ile Arg Ala Leu Ala Ala Leu Arg Ile Asp Phe His
273                      85                      90                      95
276 Asn Pro Asp Arg Ala Tyr Asp Ala Val Gln Leu Phe Ala Leu Thr Gly
277      100                      105                      110
280 Pro Ala Glu Ser Lys Gly Glu Ile Thr Pro Glu Leu Leu Gly Val Met
281      115                      120                      125
284 Arg Arg Leu Trp Ala Asp Pro Gly Ala Gln Ala Cys Phe Ser Arg Ser
285      130                      135                      140
288 Ser Glu Tyr His Leu Glu Asp Asn Ala Ala Tyr Tyr Leu Asn Asp Leu
289 145                      150                      155                      160
292 Glu Arg Ile Ala Ala Ala Asp Tyr Ile Pro Thr Val Glu Asp Ile Leu
293                      165                      170                      175
296 Arg Ser Arg Asp Met Thr Thr Gly Ile Val Glu Asn Lys Phe Thr Phe
297      180                      185                      190
300 Lys Glu Leu Thr Phe Lys Met Val Asp Val Gly Gly Gln Arg Ser Glu
301      195                      200                      205
304 Arg Lys Lys Trp Ile His Cys Phe Glu Gly Val Thr Ala Ile Ile Phe
305      210                      215                      220
308 Cys Val Glu Leu Ser Gly Tyr Asp Leu Lys Leu Tyr Glu Asp Asn Gln
309 225                      230                      235                      240
312 Thr Ser Arg Met Ala Glu Ser Leu Arg Leu Phe Asp Ser Ile Cys Asn
313                      245                      250                      255
316 Asn Asn Trp Phe Ile Asn Thr Ser Leu Ile Leu Phe Leu Asn Lys Lys
317      260                      265                      270
320 Asp Leu Leu Ala Glu Lys Ile Arg Arg Ile Pro Leu Thr Ile Cys Phe
321      275                      280                      285
324 Pro Glu Tyr Lys Gly Gln Asn Thr Tyr Glu Glu Ala Ala Val Tyr Ile
325      290                      295                      300
328 Gln Arg Gln Phe Glu Asp Leu Asn Arg Asn Lys Glu Thr Lys Glu Ile
329 305                      310                      315                      320
332 Tyr Ser His Phe Thr Cys Ala Thr Asp Thr Ser Asn Ile Gln Phe Val
333                      325                      330                      335
336 Phe Asp Ala Val Thr Asp Val Ile Ile Gln Asn Asn Leu Lys Tyr Ile
337      340                      345                      350
340 Gly Leu Cys
341      355
344 <210> SEQ ID NO: 4
345 <211> LENGTH: 374
346 <212> TYPE: PRT
347 <213> ORGANISM: Artificial
349 <220> FEATURE:
350 <223> OTHER INFORMATION: Synthetic
352 <300> PUBLICATION INFORMATION:
353 <301> AUTHORS: SEJAL M. MODY, MAURICE K. C. HO, SUSHMA A. JOSHI, and YUNG H.
354      WONG

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PATENT APPLICATION: US/10/663,650A

DATE: 10/29/2004

TIME: 17:14:05

Input Set : A:\Updated Sequence Listing.ST25.txt

Output Set: N:\CRF4\10292004\J663650A.raw

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355 <302> TITLE: Incorporation of GalphaZ-Specific Sequence at the Carboxyl
356      Terminus Increases the Promiscuity of Galpha16 toward Gi-Coupled
357      Receptors
358 <303> JOURNAL: The American Society for Pharmacology and Experimental
359      Therapeutics
360 <304> VOLUME: 57
361 <306> PAGES: 13-23
362 <307> DATE: 2000
364 <400> SEQUENCE: 4
366 Met Ala Arg Ser Leu Thr Trp Arg Cys Cys Pro Trp Cys Leu Thr Glu
367 1      5      10      15
370 Asp Glu Lys Ala Ala Arg Val Asp Gln Glu Ile Asn Arg Ile Leu
371      20      25      30
374 Leu Glu Gln Lys Lys Gln Asp Arg Gly Glu Leu Lys Leu Leu Leu
375      35      40      45
378 Gly Pro Gly Glu Ser Gly Lys Ser Thr Phe Ile Lys Gln Met Arg Ile
379      50      55      60
382 Ile His Gly Ala Gly Tyr Ser Glu Glu Glu Arg Lys Gly Phe Arg Pro
383 65      70      75      80
386 Leu Val Tyr Gln Asn Ile Phe Val Ser Met Arg Ala Met Ile Glu Ala
387      85      90      95
390 Met Glu Arg Leu Gln Ile Pro Phe Ser Arg Pro Glu Ser Lys His His
391      100     105     110
394 Ala Ser Leu Val Met Ser Gln Asp Pro Tyr Lys Val Thr Thr Phe Glu
395      115     120     125
398 Lys Arg Tyr Ala Ala Ala Met Gln Trp Leu Trp Arg Asp Ala Gly Ile
399      130     135     140
402 Arg Ala Cys Tyr Glu Arg Arg Arg Glu Phe His Leu Leu Asp Ser Ala
403 145     150     155     160
406 Val Tyr Tyr Leu Ser His Leu Glu Arg Ile Thr Glu Glu Gly Tyr Val
407      165     170     175
410 Pro Thr Ala Gln Asp Val Leu Arg Ser Arg Met Pro Thr Thr Gly Ile
411      180     185     190
414 Asn Glu Tyr Cys Phe Ser Val Gln Lys Thr Asn Leu Arg Ile Val Asp
415      195     200     205
418 Val Gly Gly Gln Lys Ser Glu Arg Lys Lys Trp Ile His Cys Phe Glu
419      210     215     220
422 Asn Val Ile Ala Leu Ile Tyr Leu Ala Ser Leu Ser Glu Tyr Asp Gln
423 225     230     235     240
426 Cys Leu Glu Glu Asn Asn Gln Glu Asn Arg Met Lys Glu Ser Leu Ala
427      245     250     255
430 Leu Phe Gly Thr Ile Leu Glu Leu Pro Trp Phe Lys Ser Thr Ser Val
431      260     265     270
434 Ile Leu Phe Leu Asn Lys Thr Asp Ile Leu Glu Glu Lys Ile Pro Thr
435      275     280     285
438 Ser His Leu Ala Thr Tyr Phe Pro Ser Phe Gln Gly Pro Lys Gln Asp
439      290     295     300
442 Ala Glu Ala Ala Lys Arg Phe Ile Leu Asp Met Tyr Thr Arg Met Tyr
443 305     310     315     320

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/663,650A

DATE: 10/29/2004  
TIME: 17:14:06

Input Set : A:\Updated Sequence Listing.ST25.txt  
Output Set: N:\CRF4\10292004\J663650A.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:4,7,8,11,12,13,14,15,19,20,21,22,23,24

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/663,650A

DATE: 10/29/2004

TIME: 17:14:06

Input Set : A:\Updated Sequence Listing.ST25.txt

Output Set: N:\CRF4\10292004\J663650A.raw